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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,435	05/05/2005	Masoud Bassiri	212/740US	6157
23371	7590	08/10/2007	EXAMINER	
CROCKETT & CROCKETT 24012 CALLE DE LA PLATA SUITE 400 LAGUNA HILLS, CA 92653			WENDELL, ANDREW	
		ART UNIT	PAPER NUMBER	
		2618		
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		08/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/535,435	BASSIRI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andrew Wendell	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 May 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,4,5,8-11 and 19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4,5,8-11 and 19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/25/2007 has been entered.

***Priority***

2. It is noted that this application appears to claim subject matter disclosed in prior Application No. PCT/SG03/00278, filed 11/28/2003. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November

Art Unit: 2618

29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its

inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US Pat Appl# 2004/0203911) in view of Moriya et al. (US Pat# 6,108,535).

Regarding claim 1, Masuda et al. wireless communication restriction device, repeater and base station teaches a primary repeater 430 (Fig. 4) operable to receive cell system downlink RF signals and transmit primary repeater uplink RF signals to the cell phone system 440 and 130 (Fig. 4); at least one auxiliary repeater 410 (Fig. 4) arranged within the enclosed environment 100 (Fig. 4); at least one gateway antenna 431 (Fig. 4 and Section 0060), coupled to the primary repeater, arranged at an entrance point of the enclosed environment so as to radiate primary repeater downlink RF signals 450 (Fig. 4) into the enclosed environment and receive auxiliary repeater uplink RF signals 451 (Fig. 4) from the auxiliary repeater 410 (Fig. 4), a donor antenna 111 (Fig. 4) coupled to the auxiliary repeater 410 (Fig. 4), the donor antenna and auxiliary repeater being operable to receive primary repeater downlink RF signals 450

(Fig. 4) from the primary repeater 430 (Fig. 4) and radiate auxiliary repeater uplink RF signals 451 (Fig. 4) to the primary repeater 430 (Fig. 4); and a server antenna 312 (Fig. 4) coupled to the auxiliary repeater 410 (Fig. 4), the server antenna and auxiliary repeater being operable to receive cell phone uplink RF signals from the cell phone 120 (Fig. 4) within the enclosed environment and radiate auxiliary repeater downlink RF signals to the cell phone 120 (Fig. 4, Sections 0056-0057 and 0060); wherein the auxiliary repeater 410 (Fig. 4) and primary downlink RF signals 460 (Fig. 4) convey information in the cell phone system downlink signal to the cell phone 120 (Fig. 4) and the auxiliary repeater 410 (Fig. 4) and primary repeater 430 (Fig. 4) uplink RF signals 451 (Fig. 4) convey information in the cell phone uplink signal to the cell phone system 440 and 130 (Fig. 4), to maintain communications between the cell phone 120 (Fig. 4) and the cell phone system 440 and 130 (Fig. 4, "Thus, communication can be made possible even if the train runs in circumstances where radio waves from the normal base station 130 cannot be reach," Section 0060); wherein the auxiliary repeater 410 (Fig. 4) is mounted on a mobile conveyance movable in the enclosed environment 100 (Fig. 4) with the donor antenna 111 (Fig. 4) located outside the mobile conveyance and the server antenna 312 (Fig. 4) located inside the mobile conveyance. Masuda et al. fails to teach a lift shaft and car.

Moriya et al. mobile communication system including service management of traffic machines teaches wherein the enclosed environment is in a lift shaft 37 (Fig. 11), the mobile conveyance is a lift car 34 (Fig. 11) and the gateway antenna 7A (Fig. 11) is arranged at a ceiling of the lift shaft.

Therefore it would have been obvious at the time the invention was made to incorporate a lift shaft and car as taught by Moriya et al. into Masuda et al. wireless communication restriction device, repeater and base station in order to reduce user's operation and waiting time (Col. 3 lines 3-10).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US Pat Appl# 2004/0203911) in view of Moriya et al. (US Pat# 6,108,535) and further in view of Shields (US Pat# 6,701,157).

Regarding claim 4, Masuda in view of Masauda teaches the limitations in claim 1. Masuda et al. fails to teach adjustable gain based on distance.

Shields transmitter circuit architecture teaches an amplifier having a gain that is adjustable based on a distance between the mobile conveyance and the gateway antenna (Col. 2 lines 61-67).

Therefore it would have been obvious at the time the invention was made to incorporate adjustable gain based on distance as taught by Shields into a lift shaft and car as taught by Moriya into Masuda et al. wireless communication restriction device, repeater and base station in order to allow a maximum number of remote stations to communicate with the base station (Col. 3 lines 40-43).

6. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US Pat Appl# 2004/0203911) in view of Moriya et al. (US Pat# 6,108,535) and further in view of Yarkosky (US Pat# 6,895,218).

Regarding claim 5, Masuda in view of Moriya teaches the limitations in claim 1. Masuda et al. fails to teach auxiliary repeaters arranged in cascade.

Yarkosky's in-building distribution using wireless access technology teaches a plurality of auxiliary repeaters 358, 362, and 366 (Fig. 8) arranged spaced apart from each other in a cascade within the enclosed environment 354 (Fig. 8).

Therefore it would have been obvious at the time the invention was made to incorporate auxiliary repeaters arranged in cascade as taught by Yarkosky into a lift shaft and car as taught by Moriya into Masuda et al. wireless communication restriction device; repeater and base station in order to lower costs and reduce cabling (Col. 2 lines 28-36).

Regarding claim 8, the combination including Yarkosky teaches a plurality of antennas 358, 362, and 366 (Fig. 8) arranged at respective entrance points of the enclosed environment 354 (Fig. 8).

7. Claims 9-11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US Pat Appl# 2004/0203911) in view of Moriya et al. (US Pat# 6,108,535) and further in view of Bolch et al. (US Pat# 6,364,066).

Regarding claim 9, Masuda et al. teaches a first interface 430 (Fig. 4) that is coupled to a control station for converting downlink control data 450 (Fig. 4) into corresponding downlink control RF signals and for converting uplink signaling RF signals (to 440, Fig. 4) into corresponding uplink signaling data; a first combiner/decombiner that is coupled to the first interface for combining the downlink RF signals 450 (Fig. 4) with the downlink control RF signals for transmission by the gateway antenna 431 (Fig. 4), and for separating uplink RF signals from the uplink signaling RF signals (to 440, Fig. 4) received by the gateway antenna 431 (Fig. 4); a

second interface 410 (Fig. 4) that is coupled to a signaling and driving system for converting the downlink control RF signals 460 (Fig. 4) into driver signals and for converting signaling signals into the uplink signaling RF signals 451 (Fig. 4); and a second combiner/decombiner that is coupled to the second interface 410 (Fig. 4) for combining the uplink RF signals 451 (Fig. 4) with the uplink signaling RF signals for transmission by the donor antenna 111 (Fig. 4) of the auxiliary repeater 410 (Fig. 4), and for separating the downlink RF signals 460 (Fig. 4) from the downlink control RF signals received by the donor antenna 111 (Fig. 4) of the auxiliary repeater 410 (Fig. 4).

4). Masuada fails to teach driver signals.

Bolch teaches driver signals (Col. 3 lines 39-62).

Therefore it would have been obvious at the time the invention was made to incorporate driver signals as taught by Bolch into a lift shaft and car as taught by Moriya into Masuda et al. wireless communication restriction device, repeater and base station in order to increase convenience (Col. 1 lines 45-55).

Regarding claim 10, Masuda et al. teaches wherein the signaling and driving system is arranged in the mobile conveyance and comprises a driver for controlling the mobile conveyance based on the driver signals, and a sensor for producing the signaling signals based on a status of the mobile conveyance (Section 0020). Masuda fails to teach driver signals.

Bolch teaches driver signals (Col. 3 lines 39-62).

Regarding claim 11, Moriya et al. further teaches wherein the signaling and driving system further comprises a signal generator 31, 32, and 36 (Fig. 11) being

operable by an operator 11 (Fig. 11) of the mobile conveyance 34 (Fig. 11). Moriya fails to teach driver signals.

Bolch teaches driver signals (Col. 3 lines 39-62).

Regarding claim 19, Masuda et al. teaches a first interface 430 (Fig. 4) that is coupled to a control station for converting downlink control data 450 (Fig. 4) into corresponding primary repeater downlink control RF signals 450 (Fig. 4) and for converting auxiliary repeater uplink signaling RF signals (to 440, Fig. 4) into corresponding uplink signaling data; a first combiner/decombiner that is coupled to the first interface for combining the downlink RF signals 450 (Fig. 4) with the primary repeater downlink control RF signals for transmission by the gateway antenna 431 (Fig. 4), and for separating auxiliary repeater uplink RF signals from the auxiliary repeater uplink signaling RF signals (to 440, Fig. 4) received by the gateway antenna 431 (Fig. 4); a second interface 410 (Fig. 4) that is coupled to a signaling and driving system for converting the primary repeater downlink control RF signals 460 (Fig. 4) into driver signals and for converting signaling signals into the auxiliary repeater uplink signaling RF signals 451 (Fig. 4); and a second combiner/decombiner that is coupled to the second interface 410 (Fig. 4) for combining the auxiliary repeater uplink RF signals 451 (Fig. 4) with the auxiliary repeater uplink signaling RF signals for transmission by the donor antenna 111 (Fig. 4) of the auxiliary repeater 410 (Fig. 4), and for separating the primary repeater downlink RF signals 460 (Fig. 4) from the primary repeater downlink control RF signals received by the donor antenna 111 (Fig. 4) of the auxiliary repeater 410 (Fig. 4). Masuada fails to teach driver signals.

Bolch teaches driver signals (Col. 3 lines 39-62).

***Response to Arguments***

Applicant's Remarks	Examiner's Response
"But when not disabled, as shown in Figure 3, communication from the cell system to the cell phone is direct, and bypasses the repeater."	Examiner refers to Figure 4 in the rejection and never referred to Figure 3.
"Regarding claim 9 and 10, it appears from the Examiner's table that the examiner is confusing control of communications with control of the conveyance, as there is utterly no indication in Masuda that any part of his signal is used to control the conveyance in which the system is implemented."	Applicant's arguments with respect to claims 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Andrew Wendell*  
Andrew Wendell  
Examiner  
Art Unit 2618

7/24/2007

  
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